

Title (en)
VARIABLE INDUCTOR FOR PLASMA GENERATOR

Title (de)
VARIABLE INDUKTOR FÜR EINEN PLASMA GENERATOR

Title (fr)
INDUCTEUR VARIABLE POUR GÉNÉRATEUR DE PLASMA

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Application
EP 22177570 A 20220607

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Abstract (en)
This disclosure describes systems, methods, and apparatus for waveform control, comprising: a power supply having an input terminal, and at least one output terminal for coupling to a load; a controller; a variable inductor coupled to at least one of the output terminals, the variable inductor comprising a first magnetic core having a plurality of arms, including at least a first inductor arm and a first control arm, wherein an inductance winding having one or more turns is wound around the first inductor arm, and wherein a first control winding comprising one or more turns is wound around the first control arm; and a DC current source coupled to the first control arm and the controller, the controller configured to adjust a DC bias applied by the DC current source to the first control arm to control an output waveform at the at least one output terminal.

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Citation (applicant)
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• E. A. BITENCOURT. R. COSETINI. G. VEGNERR. N. DO PRADO: "A ferromagnetic based variable inductor analysis and design methodology", 2015 IEEE 13TH BRAZILIAN POWER ELECTRONICS CONFERENCE AND 1ST SOUTHERN POWER ELECTRONICS CONFERENCE (COBEP/SPEC), 2015, pages 1 - 5, XP032874982, DOI: 10.1109/COBEP.2015.7420081

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